CULTURAL RESOURCES SURVEY OF THE HAMMOND CROSSROAD-BURKE ROAD 115kV PROJECT, CALHOUN COUNTY, SOUTH CAROLINA

CHICORA RESEARCH CONTRIBUTION 441

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ABSTRACT

This study reports on an intensive cultural resources survey of an approximately 8.5 mile corridor that runs north-south through Calhoun County, South Carolina. The work was conducted to assist Central Electric Power Cooperative in complying with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The corridor is to be used by Central Electric Power Cooperative for the construction of a transmission line. This line will begin at an existing transmission line to the north and terminate at an existing substation to the south. The topography is undulating with drops in elevation at the various drainages throughout the corridor.

The proposed route will require the clearing of the corridor, followed by construction of the proposed transmission line. These activities have the potential to affect archaeological and historical sites that may be in the project corridor. For this study an area of potential effect (APE) 0.5 mile around the proposed transmission line was assumed.

An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology failed to identify any previously recorded sites within the APE.

The S.C. Department of Archives and History GIS was consulted for any previously recorded sites. No sites were found, although no comprehensive architectural survey has been performed for Calhoun County.

The archaeological survey of the corridor incorporated shovel testing at 100-foot intervals along the center line of the 75-foot right-of-way, which was marked by stakes and flags. All shovel test fill was screened through ¼-inch mesh with a total of 450 shovel tests excavated along the corridor.

As a result of these investigations three sites, 38CL78-80 were identified. Site 38CL78 is an eighteenth to nineteenth century domestic site; site 38CL79 and site 38CL80 are both twentieth century house sites. Site 38CL78 is potentially eligible for the National Register of Historic Places for its integrity and ability to address significant research questions. The two house sites, 38CL79 and 38CL80, are recommended not eligible for the lack of pre-1950 artifacts and the low potential to address significant research questions.

A survey of public roads within a 0.5 mile of the proposed undertaking was conducted in an effort to identify any architectural sites over 50 years old which also retained their integrity. No such structures were found.

Finally, it is possible that archaeological remains may be encountered in the project area during clearing activities. Crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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INTRODUCTION

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tommy L. Jackson of Central Electric Power Cooperative in Columbia, South Carolina. The work was conducted to assist Central Electric Power Cooperative comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The project site consists of a corridor measuring about 8.5 miles for use as a transmission corridor, situated in central Calhoun County west of the town of St. Mathews (Figure 1). The corridor will connect an existing powerline at the north to the Burke Road Substation at the south.

The corridor consists of undulating topography and runs through a variety of vegetation including a mixed pine and hardwood forest, fallow fields, recently logged areas, and areas of wetland.

The corridor, as previously mentioned, is intended to be used as a transmission route for a 115kV line. Landscape alteration, primarily clearing, subsequent erection of the poles and other facilities, erecting lines, and long-term maintenance of the transmission line will cause damage to the ground surface and any archaeological resources that may be present in the survey area.

Construction, operation, and maintenance of the transmission line may also have an impact on historic resources in the project area. Although the project will not remove any structures, transmission routes (as well as other above grade projects) may detract from the visual integrity of historic properties, creating what many consider discordant surroundings. As a result, this architectural survey uses an area of potential effect (APE) about 0.5 mile in diameter around the proposed corridor. No structures were found, however, that exhibit the integrity needed to warrant a National Register nomination.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of this portion of Calhoun County.

We were requested by Mr. Tommy L. Jackson of Central Electric Power Cooperative to perform a cultural resources survey on January 27, 2006. This included examination of the site files at the S.C. Institute of Archaeology and Anthropology. As a result of that work no previously identified sites were found.

Initial background investigations also incorporated a review of the site files at the South Carolina Department of Archives and History. As a result of that work no sites were identified in the 0.5 mile APE. A comprehensive survey has not been performed for Calhoun County.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files.

The archaeological survey was conducted from April 18-21, 2006 by Ms. Nicole Southerland , and Ms. Julie Poppell under the direction of Dr. Michael Trinkley.

This report details the investigation of the project area undertaken by Chicora Foundation and the results of that investigation.

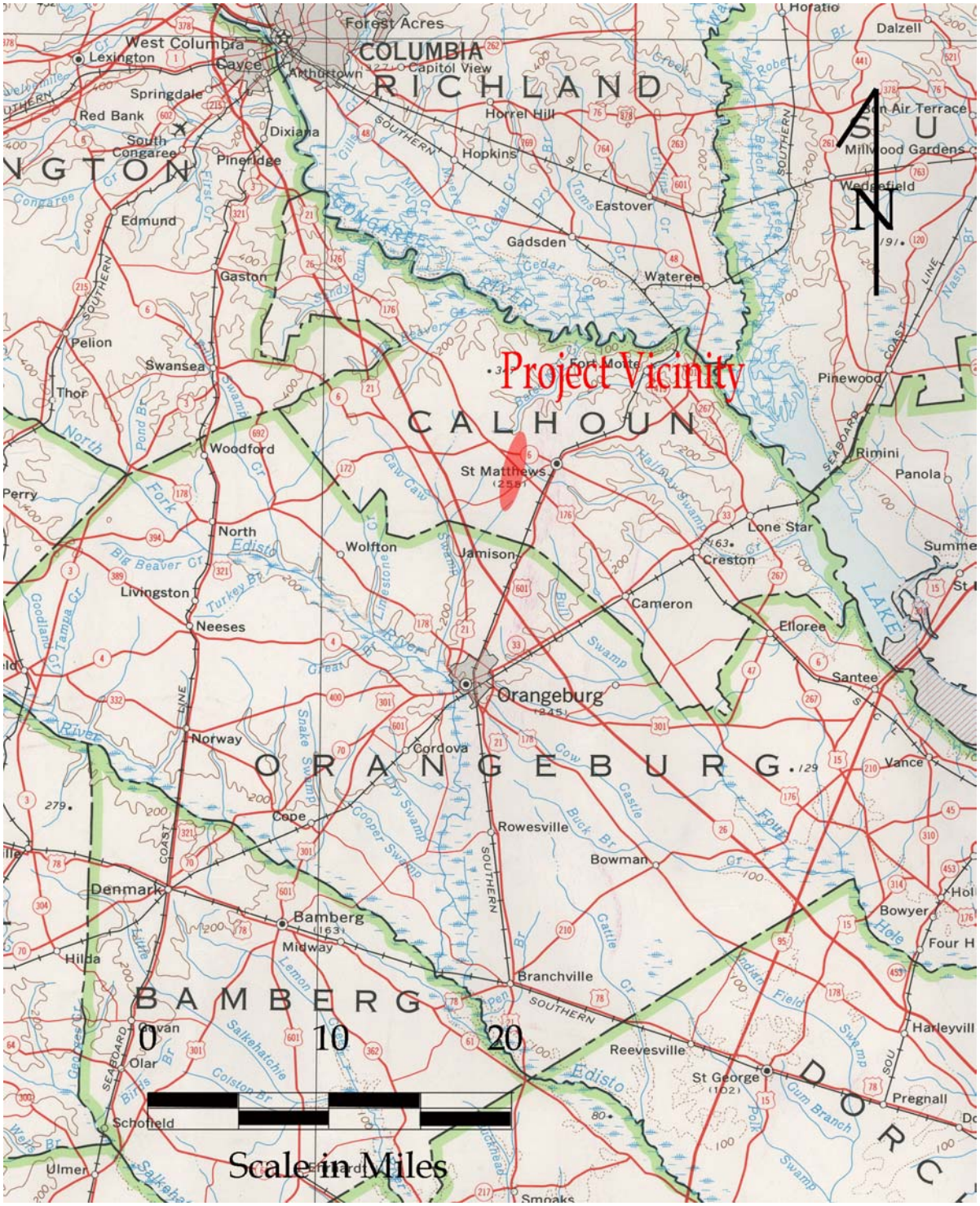

Figure 1. Project vicinity in Calhoun County (basemap is USGS South Carolina 1:500,000).

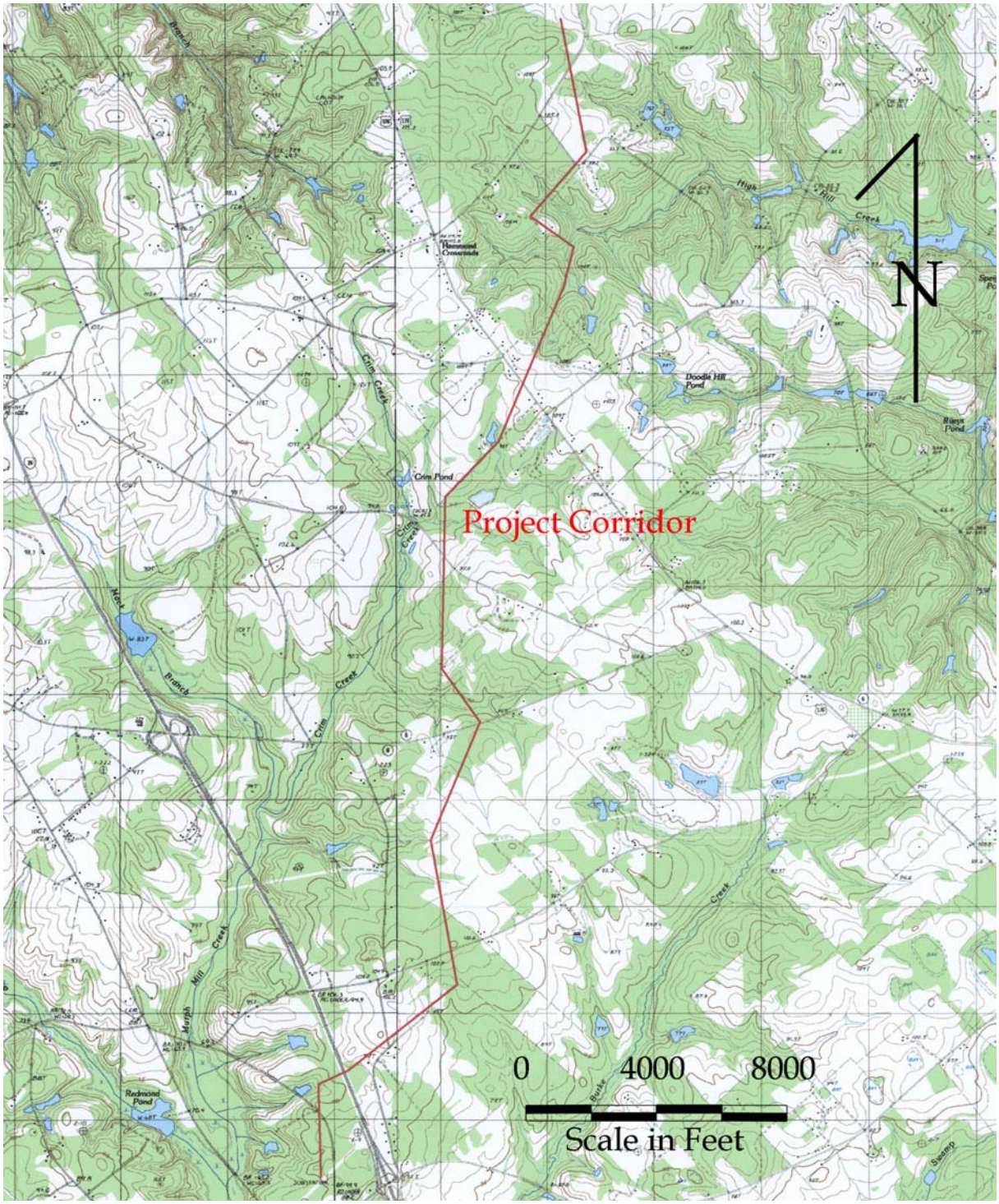

Figure 2. Transmission corridor (basemap is USGS Staley Crossroads and St. Mathews 7.5′).

ENVIRONMENTAL BACKGROUND

Physiographic Province

The project corridor is situated in the Upper Coastal Plain, south of the Fall Line and the Sand Hills found along the northern and western edges of the County. Elevations in the Upper Coastal Plain range from 100 to 270 feet above mean sea level (AMSL), with the topography being gently rolling. As Kovacik and Winberry (1987:20) observe, it can be very difficult to distinguish the Upper Coastal Plain from that of the Sand Hills or even the lower Piedmont. You find the flatter, and almost featureless, Coastal Plain topography further to the southeast, south of the Citronelle Escarpment (Orangeburg Scarp).

Calhoun County is drained primarily by the Congaree River, which flows southeastwardly along its northern border with Richland County. Other significant drainages include the Caw Caw Swamp, which flows southeastwardly into the North Fork of the Edisto River, and Halfway Swamp Creek, which drains much of the southern portion of the County, eventually flowing into the Congaree River.

Mills also comments on the numerous creeks and rivers of the Orangeburg District (of which Calhoun County was a part of at that time). He notes that many were navigable (Mills 1972[1826]: 664-665) and the highest quality lands were situated along the Edisto. Since the area was subject to flooding, however, relatively little of the land was in active cultivation. He remarks that, "owing to their being so narrow, they would require expensive embankments, which would probably not be repaid in the value of the land thus reclaimed" (Mills 1972[1826]: 659).

Mills also comments that "Orangeburg lies within the alluvial region entirely; the upper edge just dipping into the primitive or granite region" (Mills 1972[1826]: 657). Today we recognize that the "upper region" lies outside the boundaries of Calhoun County, which includes only the Upper Coastal Plain and a small portion of the Sand Hills. We also recognize the complex geology of the Upper Coastal Plain where there are bedded sands overlaying kaolintic clays and clayey, quartzose sands (Murphy 1995: 93).

In this stone poor section of the state the

Figure 3. Corridor through a mixed pine-hardwood forest.

Figure 4. Portion of the corridor through a fallow field.

nearest source of lithic materials for Native Americans would be the metamorphic and volcanic rocks of the Carolina Slate Belt which outcrop to the north of the survey corridor in Anson County, North Carolina and west along the fall line in southeastern Lancaster, northern Chesterfield, and Kershaw counties in South Carolina. Far closer are occasional deposits or outcrops of cherts and orthoquartzites (see Anderson et al. 1973: 11-12).

Soils

Mills commented that the Orangeburg district included a variety of soils. Most were described as having "a light, sandy nature, thin soil, but bottomed on clay" (Mills 1972[1826]: 658). This clay bottom helps minimize the droughty nature of the sandy soils, many of which are characterized as excessively well drained. Along the Congaree and Santee Rivers he observed a very different soil, described as "a stiff, red clay" found on rolling hills – a description of a small area of the piedmont.

While a small portion of Calhoun County, forming a wedge along the Lexington County line, is within the Sand Hills, most of the region is within the Coastal Plain. These soils, including those found in the survey vicinity, are the Norfolk-Ruston-Lakeland association. These soils are gently to strongly sloping soils within the Coastal Plain (Lawrence 1963).

The survey corridor runs through six different soils (Lawrence 1963). Most of the soils are well-drained, inc-luding Norfolk loamy sands, Vaucluse loamy sands, and Faceville soils, although the excessively drained Lakeland sands and the moderately well-drained Killian loamy sands are found in abundance. The poorly drained Rains sandy loam is found in only a few small areas.

Norfolk soils have an A horizon of grayish brown (10YR5/2) loamy sand to 1.1 foot in depth over a yellowish brown (10YR5/8) sandy clay loam, which occurs to a depth of about 3.8 feet. Vaucluse soils have an A horizon of dark brown (10YR4/3) loamy sand to 1.6 feet in depth over a yellowish red (5YR5/6) sandy clay loam to a depth of 1.6 feet. The eroded Faceville Series has an A horizon of dark grayish brown (`0YR4/2) loamy fine sand to 0.7 foot over a pale brown (10YR6/3) loamy fine sand.

Lakeland soils, which have a slope from 0-10% on the project corridor, have an A horizon of very dark grayish brown (2.5Y3/2) sand to 0.5 foot over a yellowish brown (10YR5/4) sand to a depth of 1.8 feet. Killian soils have an A horizon of dark gray (10YR4/1) loamy sand to 0.8 foot in depth over a pale brown (10YR6/3) clay to a depth of 2.3 feet.

Rains soils generally have an A horizon of very dark gray (10YR3/1) sandy loam to 0.5 foot in depth over a gray (10YR5/1) sandy loam to 1.1 feet in depth.

Historically sandy soils have been recognized to have low fertility. During the early nineteenth century, Mills commented that local farmers were beginning to more aggressively deal with the nutritional deficiencies of the soil:

> The planters now improve their lands by manuring the corn hills either with cotton seed or swamp mud, throwing up in pens in the fall season, to remain during the winter. By mixing with it cotton seed, stable manure, or decayed vegetables, its fertilizing qualities are greatly increased (Mills 1972[1826]: 660).

Floristics

In the early nineteenth century, Mills comments that the river lands – especially those adjacent to the Edisto – were dominated by "the magnolia, beech, willow, ash, elm, oak, birch, walnut, and hickory" while in the deeper swamp were "large groups of cypress, loblolly, bay, sweet bay, maple, tupelo, and poplar trees of an immense height and circumference" (Mills 1972[1826]: 658). In contrast, pines dominated the uplands.

This situation is largely unchanged today. On the bluffs overlooking the rivers there is a pine-hardwood community dominated by loblolly pine, hickory, and various oaks. On the lower slopes, the vegetation is dominated by species tolerant of the wetter conditions, such as white oak, sweet gum, willow oak, and black gum. In the river floodplains there are sweet gum, laurel oak, water hickory, and tupelo (Kovacik and Winberry 1987: 45).

The survey corridor is surrounded by many different types of vegetation including mixed pine-hardwood forests, planted pines, hardwood stands, fallow fields, pasture, and wetland.

Climate

Like elsewhere in the state, Mills distinguished between the swamp lands and the sand lands in his assessment of Orangeburg's health:

> The sand hill section of this district presents as fine and healthy a climate as any country can boast of. Diseases are rare here . . . . Along the margins of the creeks and rivers, and within the influence of swamps, bays, and stagnant ponds, fevers and agues, bilious remittents, typhus, and other inflammatory diseases prevail (Mills 1972[1826]: 664).

This portion of South Carolina is dominated by the movement of systems across the country, but there are relatively few complete exchanges of air masses in the summer. This results in few breaks in the midsummer heat, with temperatures ranging from the high 80s to the low 90s. In contrast, winters are mild and relatively short. There are 45 inches of annual precipitation, with nearly 27 inches falling in the growing season (Lawrence 1963: 127).

PREHISTORIC AND HISTORIC SYNOPSIS

Previous Research

Calhoun County may be one of the least well studied counties in South Carolina. There are, for example, only six reports for the county listed by Derting et al. (1991). Of these, two are surveys or plans by the Lower Savannah Council of Governments that contain virtually no substantive archaeological information. Two other reports both concern site 38CL4, a site at which the S.C. Institute of Archaeology and Anthropology conducted brief test excavations in the early 1970s, and the two remaining reports involve brief archaeological surveys – with only one of these reports identifying any archaeological resources (Smith 1977).

More recently, a survey was performed for the substation at the southern end of the current project corridor (Trinkley and Southerland 2002). That project failed to produced any sites.

Prehistoric Overview

The Paleoindian period, lasting from 12,000 to 8,000 B.C., is evidenced by basally thinned, side-notched projectile points; fluted, lanceolate projectile points; side scrapers; end scrapers; and drills (Coe 1964; Michie 1977). The Paleoindian occupation, while widespread, does not appear to have been intensive. Points usually associated with this period include the Clovis and several variants, Suwannee, Simpson, and Dalton (Goodyear et al. 1989: 36-38).

At least one Paleoindian point has been found in the Calhoun area, reportedly from the Little Bull Swamp Creek drainage (Goodyear et al. 1989: 33). This pattern of artifacts found along major river drainages has been interpreted by Michie to support the concept of an economy "oriented towards the exploitation of now extinct mega-fauna" (Michie 1977: 124).

Unfortunately, little is known about Paleoindian subsistence strategies, settlement systems, or social organization. Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on the isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980: 30).

The Archaic period, which dates from 8,000 to 1,000 B.C., does not form a sharp break with the Paleoindian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. The chronology established by Coe (1964) for the North Carolina Piedmont may be applied with little modification to the Calhoun County area. Archaic period assemblages, characterized by corner-notched, side-notched, and broad stemmed projectile points, are common in the vicinity, although they rarely are found in good, well-preserved contexts.

The Woodland period begins, by definition, with the introduction of fired clay pottery about 2,000 B.C. along the South Carolina coast, about 1,000 B.C. in the Upper Coastal Plain, and much later in the Carolina Piedmont, perhaps 500 B.C. It should be noted that many researchers call the period from about 2,500 to 1,000 B.C. the Late Archaic because of a perceived continuation of the Archaic lifestyle in spite of the manufacture of pottery. Regardless of terminology, the period from 2,000 to 500 B.C. was a period of tremendous change.

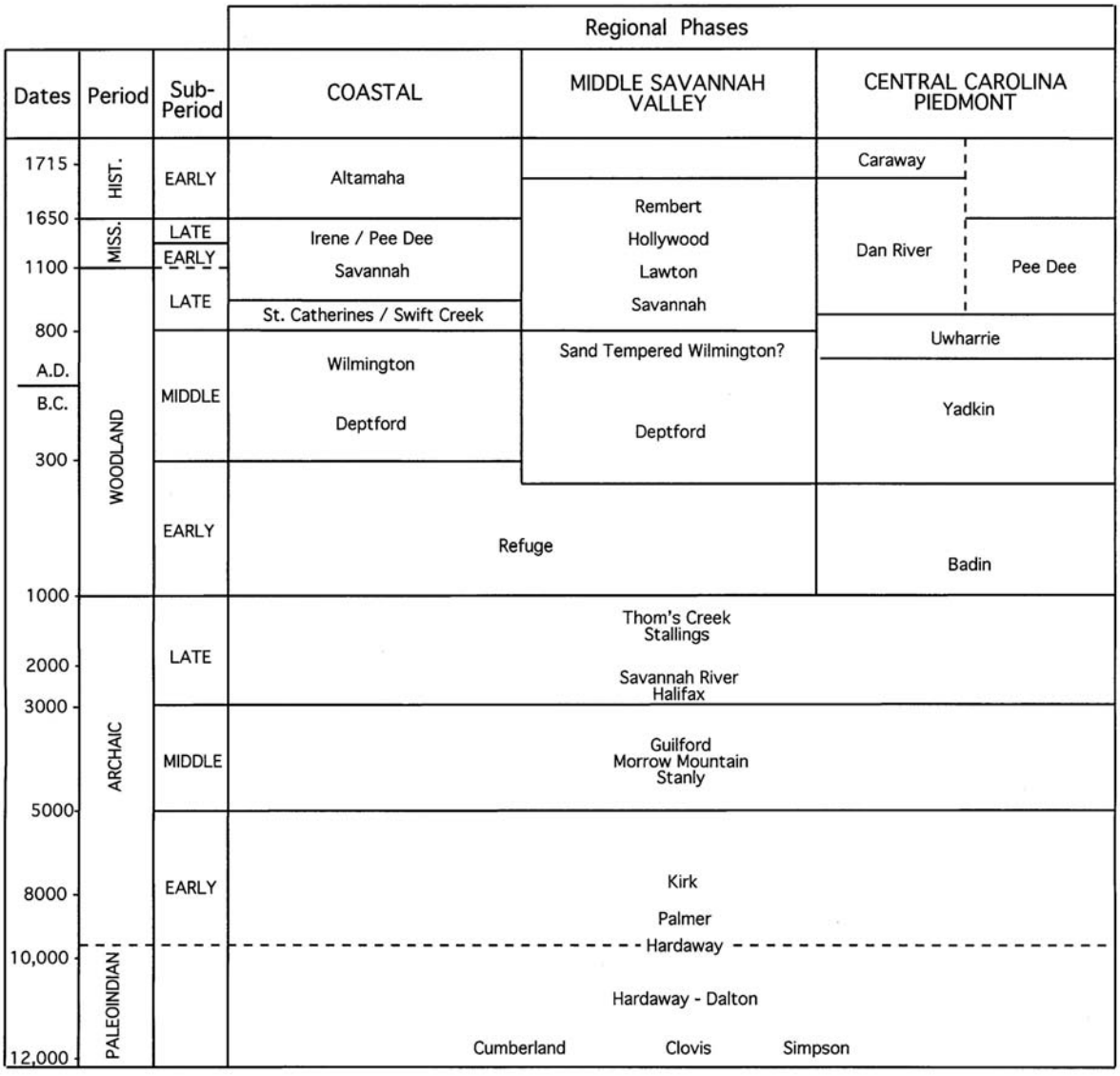

Figure 5. Generalized cultural sequence for South Carolina.

The subsistence economy during this early period was based primarily on deer hunting and fishing, with supplemental inclusions of small mammals, birds, reptiles, and shellfish. Various calculations of the probable yield of deer, fish, and other food sources identified from some coastal sites indicated that sedentary life was not only possible, but probably. Further inland it seems likely that many Native American groups continued the previous established patterns of band mobility. These frequent moves would allow the groups to take advantage of various seasonal resources, such as shad and sturgeon in the sprint, nut masts in the fall, and turkeys during the winter.

The South Appalachian Mississippian period, from about A.D. 1100 to A.D. 1640 is the most elaborate level of culture attained by the native inhabitants and is followed by cultural

disintegration brought about largely by European disease. The period is characterized by complicated stamped pottery, complex social organization, agriculture, and the construction of temple mounds and ceremonial centers. The earliest coastal phases are named the Savannah and Irene (known as Pee Dee further inland) (A.D. 1200 to 1550).

However little we know about the various small coastal tribes, considerably less is known about the protohistoric and historic tribes in the Upper Coastal Plain. The study area is, in very general terms, situated between the Congaree and Santee. Mooney (1894: 80) devotes a modest two paragraphs to the Congaree and only slightly more to the Santee.

He notes that in 1701, Lawson found the Congaree "on the northeastern bank of the river below the junction of the Wateree" (Mooney 1894: 80). In fact, Lawson's account (Lefler 1967: 33-35) is the most detailed available for the tribe. He describes their town as consisting "not of above a dozen Houses, they having other stragling Plantations up and down the Country." He reported that they had lost much of their population to smallpox and other European diseases; in spite of this the Congarees were reported to be "kind and affable to the English, the Queen being very kind, giving us what rarities her Cabin afforded, as Loblolly [a thick gruel] made with Indian Corn, and dry'd Peaches" (Lefler 1967: 35). Taukchiray suggests that this village was located on Pinetree Creek, although no archaeological effort has been made to locate the settlement (Hicks 1998: 48).

Mooney reports that by 1715 their settlements had shifted to the south bank of the Congaree, perhaps on Big Beaver Creek (Mooney 1894: 80). Taukchiray expands on this, suggesting "in 1712-1715, the Congaree lived on Congaree River – first on the west side (now Calhoun County), then on the east side (now Richland County)" with some "on the north/northeastern side of upper Congaree River around Gills and Mill Creeks, on the outskirts of present-day Columbia" (Hicks 1998: 50).

The 1715 Yemassee War further reduced their numbers and destabilized their society. Taukchiray suggests that they left their Congaree heartland in late 1716 and moved to the "northwest side of the Waccamaw River in what is now Hoory County" (Hicks 1998: 50). They stayed in this area until joining the Catawba about 1736. Although largely amalgamated by the Catawba, Taukchiray reports that as late as 1760, one of the Catawba headmen was known to the English as "Congaree Jimmy" (Hicks 1998: 50).

For the Santee we know that Lawson found them in the vicinity of the Santee Indian mounds in 1701 (Lefler 1967: 25-29; Mooney 1894: 79). Again, the tribe is reported to live in small hamlets, with Lawson remarking, "there being Plantations lying scattering here and there, for a great many Miles" (Lefler 1967: 25). In fact, the settlements continued up river at least to Jacks Creek, and there were hunting camps at least as far up as the High Hills of Santee (Hicks 1998: 30).

Mooney reports that just prior to the Yemassee War there were still two villages about 70 miles from Charleston and perhaps as many as 160 individuals (Mooney 1894: 80). Taukchiray provides a little more detail, revealing that the remains of the tribe were captured by the English and Etiwan Indians and transported to Charleston. There the men were shipped to the West Indies as slaves and the women and children were turned over to the Etiwans as slaves (Hicks 1998: 30), marking the end of the tribe.

Historic Synopsis

The earliest settlement in the area appears to have begun with the 1704 grant to Robert Sterling of 570 acres on Lyons Creek – in what is today Calhoun County. Situated about 4 miles south of St. Matthews on the Charleston Road, this seems to have served as a focus for additional settlement, largely by English and French Huguenots, who came to the area between 1735 and 1737 (DeFrancesco 1988: 1; Mills 1972[1826]:

656-657).

Settlement in the area was also spurred by the township plan of Governor Robert Johnson in the 1730s. The Amelia Township was situated on the west bank of the Congaree and Santee rivers, with the town site situated at the mount of the Congaree. Settlement was particularly attracted to the areas of Buckhead, Lyons, and Halfway Swamp Creek (Smith 1977: 9). It wasn't until the late 1740s that Amelia began to grow, but it quickly became a planters' parish and by 1757 the population had grown to 700 (Meriwether 1940: 49-50). With the end of the Cherokee threat in 1761 the area attracted a second round of growth, with many small planters and farmers coming to the Wateree's west bank, below the shoals (Central Midlands Regional Planning Council 1974: 142).

Further to the south, the Orangeburg Township was located on the east bank of the North Fork of the Edisto River, bordering Amelia to the north. The middle and upper sections, notably along the rivers, provided excellent agricultural land and this settlement attracted a variety of German and Swiss settlers. By 1740, the population had reached 500 (Meriwether 1940: 45-46).

Originally part of Orangeburg District, the 1785 act divided the district into Lewisburg (along the river), Orange, Lexington (to the north), and Winton (an early version of Barnwell along the Savannah). These counties, however, were abolished in 1791 and the Orangeburg District was reinstituted. By 1804, however, the district was again subdivided, this time into Lexington (1804), Orangeburg, and Barnwell (1800). Consequently, by the time Mills discussed the region in 1820, Orangeburg was an elongated district and Mills observed that, "its figure is very irregular, having a king of peninsula, or long narrow strip, running between two rivers, upwards of twenty-six miles from the main body of the district" (Mills 1972[1826]: 657).

During the Colonial period, Orangeburg was at best a small village, containing several taverns and stores, a courthouse, a jail, both a Lutheran and an Anglican church, and a few small residences (Edgar 1998: 163). The jail, built in 1770, was the one which General Sumter:

> besieged and took, during the Revolutionary War. The British had a garrison there consisting of 70 militia and 12 regulars. This village was for some time the seat of war. After Lord Rawdon had retreated from Camden, he took up his quarters here, whither he was pursued by Gen. Green, who offering him battle; but his lordship, secure in his strong hold, would not venture out; and Gen. Green was too weak to attack him in his works, with any prospect of success (Mills 1972[1826]: 662-663).

It was also during this same campaign that General Green and his partisans attacked and took over Fort Motte (in what is today Calhoun County) (Edgar 1998: 237).

By the second quarter of the nineteenth century, there were only three settlements in Orangeburg. The village of Orangeburg was "not favorably situated for health" according to Mills, although it was "tolerably central to the district." The second was the village of Poplar Spring, about 4.5 miles west of Orangeburg and used primarily as a summer residence. The third settlement was the village of Totness, on the north side of High Hill Creek, about 3 miles from the Congaree River. It, too, was primarily a summer village for the planters, which Mills described as "pleasant . . . and much frequented" (Mills 1972[1826]: 663).

Between 1800 and 1820, the population of the Orangeburg District had increased by over a third, from 10,155 to 15, 653. But the proportion of white increase was modest, from 5,957 in 1800 to 6,760 in 1820. The African American slave population, however, had more than doubled, from 4,110 to 8,829. This clearly documents the

rise of plantations in the region, primarily along the rivers where the best lands were situated. Although Mills comments that there was a lively timber export trade from the district and that the German settlers "made a decent living" from growing corn, "cotton engrosses most attention" (Mills 1972[1826]: 660). It was certainly cotton that supported the increase in African American bondage in the region.

The 1826 Mills' *Atlas* of the Orangeburgh District shows no structures directly on the survey corridor (Figure 6). However, the northern portion of the corridor near High Hill Creek does pass near two mills – Jackson's and Summerville – just east of the town of Totness.

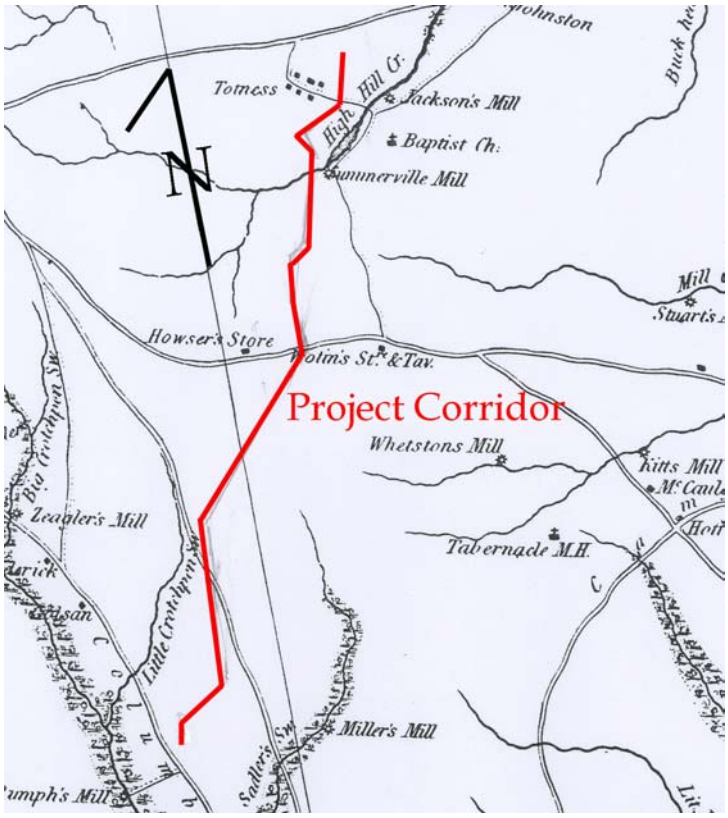

Figure 6. Portion of Mills' *Atlas* of 1826 showing the project corridor in the Orangeburgh District.

By 1850, the population had increased to 18,519, with 15,384 (83%) of these being African American slaves. Orangeburg had 1,206 farms, with an average of 150 improved acres. The district produced 614,418 bushels of Indian corn, ranking it 13th (out of 29). Also produced were 1,299,379 pounds of rice, ranking Orangeburg fifth in the state, behind fourth ranked Charleston with 16,906,273 pounds, but ahead of sixth ranked Anderson District (with 956,940 pounds). In spite of the slave population, Orangeburg District produced only 10,024 bales of cotton, ranking it thirteenth (DeBow 1854). Lawrence observed that while wheat was grown, it was affected by rust in the late antebellum and stopped being produced until rust-resistant varieties were introduced after the Civil War. He, too, reports that the region's attention was focused on cotton, which remained the area's primary crop until the mid-twentieth century when its prominence was shattered by soybeans (Lawrence 1963: 128).

Orangeburg saw little impact from the Civil War until the end, when Sherman's troops came up the north side of the Edisto, followed the North Fork into the city of Orangeburg, which was burned, and then continued north into what is today Calhoun County, crossing over the Santee River (Glatthaar 1985).

After the Civil War, with slaves no longer providing easy labor for the cotton plantations, the economy was stagnant and a slow period of rebuilding began. The remaining decades of the nineteenth century were focused on the dual goals of restoring the economy and ensuring that African Americans remained in a state as closely as possible resembling bondage.

The hiring of freedmen began immediately after the war, with variable results. The Freedmen's Bureau attempted to establish a system of wage labor, but the effort was largely

Table 1.
Systems of Tenure

	Share-Cropping	Share Renting	Cash Renting
Landlord furnishes:	land housing fuel tools work stock seed half of fertilizer feed for stock	land housing fuel 1/2 or 1/3 fertilizer	land housing fuel
Tenant furnishes:	labor half of fertilizer	labor work stock feed for stock tools seed 3/4 or 2/3 fertilizer	labor work stock feed for stock tools seed fertilizer
Landlord receives:	½ of crop	¼ or 1/3 of crop	fixed amount in cash or lint cotton
Tenant receives:	1/2 of crop	3/4 or 2/3 of crop	entire crop less fixed amount

tempered by the enactment of the Black Codes by the South Carolina Legislature in September 1865. These Codes allowed nominal freedom, while establishing a new kind of slavery, severely restricting the rights and freedoms of the black majority. Added to the Codes were oppressive contracts that reinforced the power of the plantation owner and degraded the freedom of the Blacks. Many white planters formed "Democratic Clubs," designed to counter the "radical" influence. Members of these clubs resolved not to hire "radicals," or blacks associated with radical politics.

While cash labor was initially used, gradually owners turned away from wage labor contracts, at least partially because of the scarcity of money, but also because of the prevailing belief among whites that blacks were so lazy that with money in their pockets they would not work. In its place two kinds of tenancy – sharecropping and renting – developed. While very different, both succeeded in making land ownership very difficult, if not impossible, for the vast majority of Blacks.

Sharecropping (see Table 1) required the tenant to pay his landlord part of the cop produced, while renting required that he pay a fixed rent in either cops or money. In sharecropping, the tenant supplied the labor and one-half of the fertilizer, the landlord supplied everything else – land, house, tools, work animals, animal feed, wood for fuel, and the other half of the needed fertilizer. In return, the landlord received half of the crop at harvest. This system became known as "working on halves," and the tenants as "half hands," or "half tenants."

In share-renting, the landlord supplied the land, housing, and either one-quarter or one third of the fertilizer costs. The tenant supplied the labor, animals, animal feed, tools, seed, and the remainder of the fertilizer. At harvest the crop was divided in proportion to the amount of fertilizer that each part supplied. A number of variations on this occurred, one of the most common being "third and fourth," where the landlord received one-fourth of the cotton crop and one-third of all other crops. In cash-renting the landlord provided the land and housing, with the renter providing everything else and paying a fixed per-acre rent in cash.

An 1884 account of the county revealed that while there was only one textile mill (in the town of Orangeburg), there were 112 grist mills scattered across the countryside, along with 31 flour mills. All were using water power. As a vestige of the area's rice cultivation there was also one rice mill. Cash wages, when paid, were $4 to $6 a month, with rations, a house, and a small

garden spot. The county had 322 cotton gins, each turning out about 4 bales a day. One of the most interesting observations was that South Carolina prohibition law was not observed and not enforced – apparently liquor flowed freely in Orangeburg (Anonymous 1884).

By 1900, the population of Orangeburg County was 59,663, with African Americans still dominating the population (41,442 or nearly 70%). By this time tenancy had become firmly established – there were 8,408 farms in the county, with an average size of just under 80 acres. Nearly 55% of the farms (n=4,613) were operated by cash tenants.

Nevertheless, Orangeburg recovered with a vengeance. By 1900, the county produced 1,172,520 bushels of corn, ranking it first in corn production. Its nearest competitor was Sumter with 762,120 bushels. Orangeburg also ranked first in cotton, producing 65,433 bales or 0.55 bale per acre (again its closest competitor was Sumter County, which produced 48,485 bales or 0.52 bale per acre). While a certain amount of Orangeburg's success was related to its size, it seems clear that the farms were generally profitably operated.

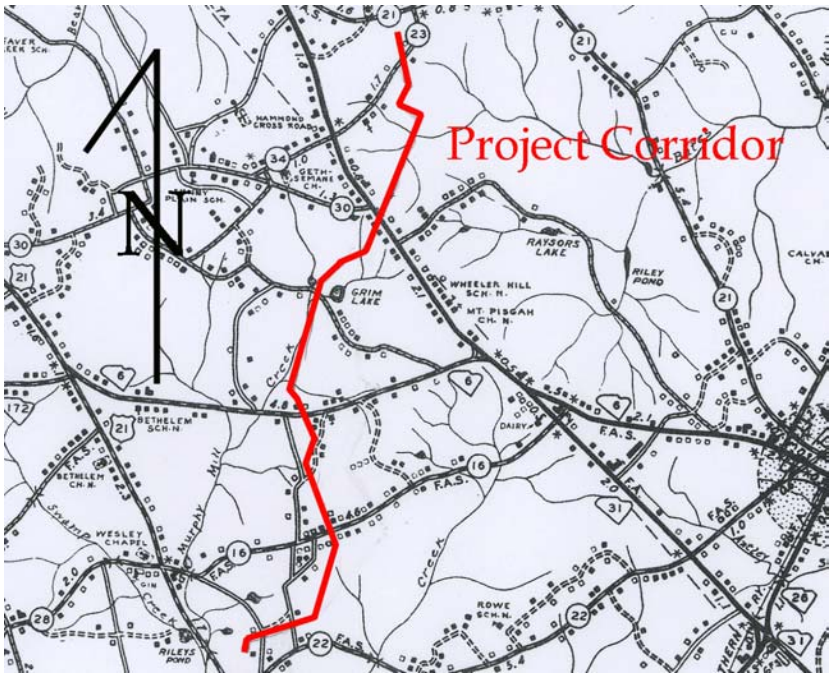

Figure 7. Portion of the 1941 *General Highway and Transportation Map of Calhoun County* showing the project corridor.

Calhoun County emerged in 1908, created from parts of Orangeburg and Lexington counties. It was small however, accounting for only 377 square miles. The population in 1910 was only 16,663.

By 1920, there were 8,558 farms in Orangeburg County, most of which (n=4,037 or 47%) were between 20 and 49 acres in size. Two-thirds of those farms were operated by African Americans. Of the 8,558 farms, 5,644 (66%) were operated by tenants and 37% of these were share tenants, with an additional 25% being croppers. Orangeburg County was dominated by an agriculture focused solely on cotton and designed to maximize profits to owners while minimizing any hope for small farmers – black or white – to ever own land.

The 1920s, however, were the beginning of the end for cotton. Cotton and tobacco prices both collapsed in 1920. This was followed by both droughts and the boll weevil. Edgar observes that in 1930, "after nearly a decade of difficulties, South Carolina agriculture was about to go under. Farmland and buildings had lost more that one-half of their value. One third of the state's farms were mortgaged, and 70% of the state's farmers survived on borrowed money" (Edgar 1998: 485).

In 1930, over 68% of all farms were operated by tenants. Only a third of these were operated by cash tenants, with the bulk operated by other forms, primarily sharecropping. The mortgage problem was worse in Orangeburg than statewide – fully two-fifths of the farms were mortgaged, with the average mortgage

representing more than 40% of the farm's value.

The 1941 *General Highway and Transportation Map of Calhoun County* (Figure 7) shows many structures along the roadways. Only three structures, however, were encountered during the survey.

Cotton production continued to fall, with only a brief upswing during the 1940s as a result of the war effort. By 1954, cotton production was down to 18,474 acres, from 23,800 acres in 1939. By 1959, it had declined to 12,851 acres. The number of farms also declined dramatically – from 1,749 in 1940 to 832 in 1959 (Lawrence 1963: 129). Lawrence also notes that:

> a planned land-use program began in 1937 in Calhoun County, when the U.S. Department of Agriculture set up its demonstration project for erosion control. But for several years before 1937 a program for reduction of crops had been in effect (Lawrence 1963: 129).

Some of the cotton acreage was taken over by soybeans, while other was converted into pasture. Much was placed in timber, so that today, Calhoun County has far less of an agricultural appearance than it did in the early twentieth century.

METHODS

Archaeological Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100-foot intervals along the center line of the corridor, which had a 75 foot right-of-way.

All soil would be screened through ¼-inch mesh, with each test numbered sequentially. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1.0 foot or until subsoil was encountered. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

These proposed techniques were implemented with no significant modifications. A total of 450 shovel tests were excavated along the corridor with additional testing at each of the three identified sites.

The GPS positions were taken with a Garmin GPS 76 rover that tracks up to twelve satellites, each with a separate channel that is continuously being read. The benefit of parallel channel receivers is their improved sensitivity and ability to obtain and hold a satellite lock in difficult situations, such as in forests or urban environments where signal obstruction is a frequent problem. This was a vital concern for the study area.

Architectural Survey

As previously discussed, we elected to use

Figure 8. View of the Burke Road Substation at the southern end of the corridor.

a 0.5 mile area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects that appeared to have been constructed before 1950. Typical of such projects, this survey recorded only those which have retained "some measure of its historic integrity" (Vivian n.d.:5) and which were visible from public roads.

For each identified resource, we would complete a Statewide Survey Site Form and at least two representative photographs would be taken. Permanent control numbers would be assigned by the Survey Staff of the S.C. Department of Archives and History at the conclusion of the study. The Site Forms for the resources identified during this study would be submitted to the S.C. Department of Archives and History. As previously mentioned, Calhoun County has not received a county-wide architectural survey.

Figure 9. Shovel testing along the corridor.

Site Evaluation

Archaeological sites will be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

> the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and
>
> a. that are associated with events that have made a significant contribution to the broad patterns of our history; or
>
> b. that are associated with the lives of persons significant in our past; or
>
> c. that embody the distinctive chara-cteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
>
> d. that have yielded, or may be likely to yield, information important in prehistory or

history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the site might be able to address, given the data sets and the context;

- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and

- identification of important research questions among all of those which might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on an archaeological site's ability to address significant research topics within the context of its available data sets.

For architectural sites, the evaluative process was somewhat different. Given the relatively limited architectural data available for most of the properties, we focus on evaluating these sites using National Register Criterion C, looking at the site's "distinctive characteristics." Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

Particular attention would be given to the integrity of design, workmanship, and materials. Design includes the organization of space, proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin* 36 observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply to either the entire property or to specific features of the property. Finally, materials C the physical items used on and in the property C are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

Laboratory Analysis

The cleaning and analysis of artifacts was conducted in Columbia at the Chicora Foundation laboratories. These materials have been catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology, the closest regional repository. The site forms for the identified archaeological sites have been filed with the South Carolina Institute of Archaeology and Anthropology. Field notes have been prepared for curation using archival standards and will be transferred to that agency as soon as the project is complete.

Analysis of the collections followed professionally accepted standard with a level of

intensity suitable to the quantity and quality of the remains. In general, the temporal, cultural, and typological classifications of historic remains follow such authors as Price (1979) and South (1977).

RESULTS OF SURVEY

Introduction

As a result of this cultural resources survey three archaeological sites (38CL78-80) were recorded (Figure 10). Site 38CL78 is an eighteenth to nineteenth century domestic site that is potentially eligible for the National Register for its integrity and ability to address significant research questions. Sites 38CL79 and 38CL80 are both twentieth century ruinous structures that failed to produce remains that would have the ability to address significant research questions. Both of these sites are recommended not eligible for the National Register.

The architectural survey did not identify any structures that appear to contain the integrity needed for a National Register nomination.

Archaeological Resources

38CL78

Site 38CL78(Figure 11) is an eighteenth to nineteenth century domestic scatter located on level topography at an elevation of about 305 feet AMSL. A central UTM coordinate for the site is 510901E 3721877N (NAD27 datum).

Shovel testing was originally completed at 100-foot intervals along the corridor with Station 433+95 (250R240) positive. Shovel tests were performed at 50-foot intervals along the corridor until two consecutive negative tests were encountered. Tests were then performed at 50-foot intervals to the east and west off the corridor in an attempt to determine the boundary of the site, however since the right-of-way of the project area was only 75-feet, we only tested to 100 feet from the center of the corridor (65 feet past the edge of the right-of-way). A total of 37 tests were excavated with 13 (35%) positive. Five of the positive tests contained only brick.

The site is located in an area that has been recently logged, which has produced good surface visibility. Shovel tests in the area generally produced Lakeland sands, which have an A horizon of very dark grayish brown (2.5Y3/2) sand to 0.5 foot over a yellowish brown (10YR5/4) sand to a depth of 1.8 feet. The A horizon in the site area, however, generally went to a depth of 1.0 foot.

As previously mentioned, the site dates from the eighteenth to the nineteenth century

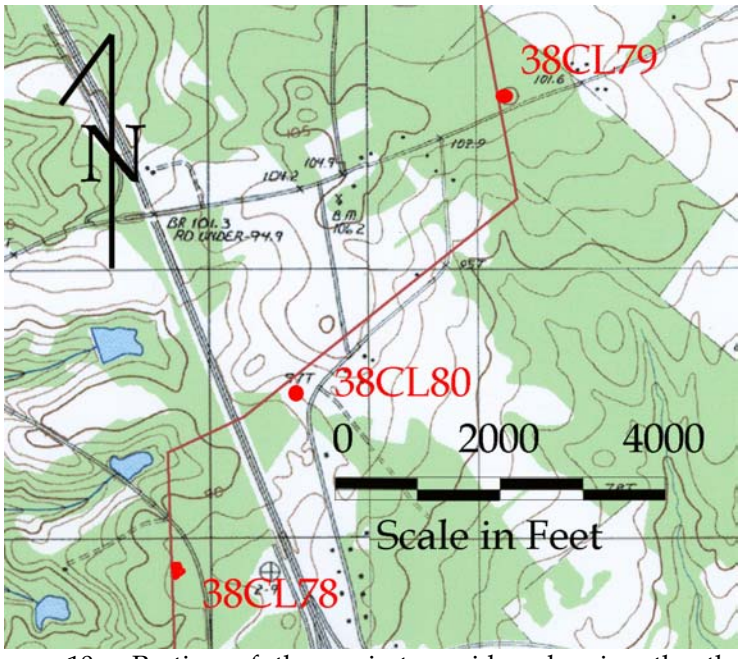

Figure 10. Portion of the project corridor showing the three identified sites

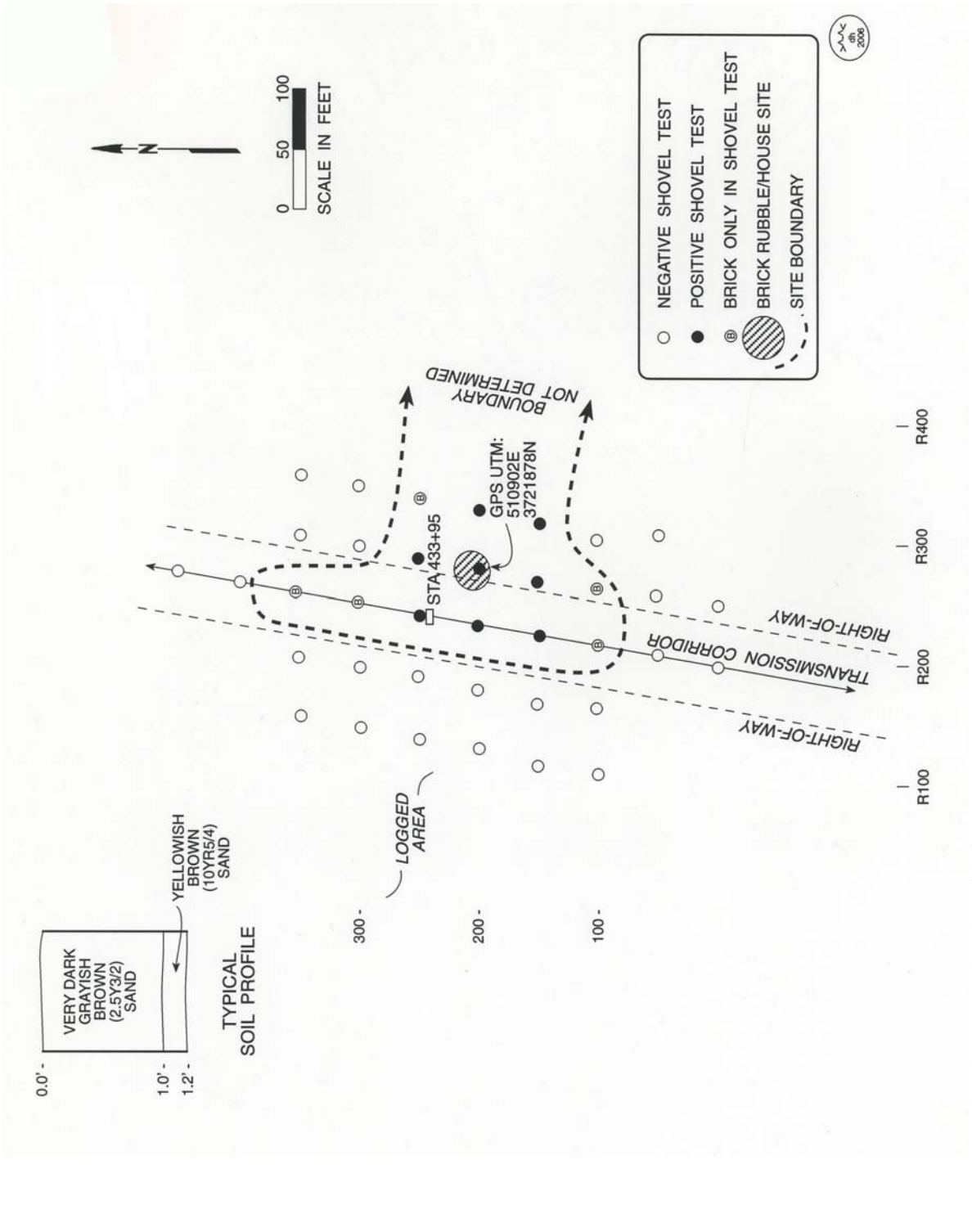

Figure 11. Sketch map and soil profile for 38CL78.

(Table 2). A mean ceramic date (MCD) for the site is 1832 with the earliest ceramic, undecorated creamware, being first produced in 1762. The latest ceramic is undecorated white-ware, which has a mean date of 1860. In addition, both machine cut and wire nails were collected. Howard (1989:55) states that machine cut nails were generally used from 1825 to 1890, when wire nails began to replace the cut nails. The site also produced various glass fragments including "black" glass, popular in the eighteenth and nineteenth century, and manganese glass, which was most common in the last part of the nineteenth century (Jones and Sullivan 1985: 13-14).

Table 2.
Artifacts from 38CL78

	150 R220	150 R270	150 R320	200 R230	200 R280	200 R330	250 R240	250 R290	Surface	**Total**
itchen Group										**41**
Creamware, undecorated		1			1					
Pearlware, undecorated									1	
earlware, blue handpaint									1	
earlware, annular									2	
Pearlware, blue edge									1	
Pearlware, brown transfer print									1	
Whiteware, undecorated		1					3		4	
Stoneware, alkaline glaze		1							1	
Stoneware, salt glaze									1	
Porcelain, bisque									1	
Glass, clear	1		1		1		1	2		
Glass, black		1	2						2	
Glass, brown		1								
Glass, manganese					1				2	
Glass, light green									1	
Glass, milk									2	
Zinc canning lid fragment			1						2	
rchitecture Group										**13**
Nail, machine cut					1					
Nail, wire			1	1				1		
Nail, UID			1	1	1	1				
Window glass		1			3			1		
ms Group										**1**
Shotgun shell base									1	
Tobacco Group										**1**
Kaolin pipestem									1	
Activities Group										**4**
Staple	1									
Flower pot fragment				1						
UID brass									1	
UID iron									1	
TOTAL										**60**

While no in situ structure remains were found, an isolated scatter of brick found is likely the location of the building (Figure 12). No evidence of a well or privy was noticed, but as previously mentioned, the entire site was not tested due to the distance from the corridor right-of-way. However, the corridor does appear to be the western edge of the site. The site extends eastward, but the boundary to the east is unknown. Along the corridor, the site extends for about 250 feet (approximately between Stations 433 to 436).

The site produced a variety of artifacts from at least five data sets (Kitchen Group, Architecture Group, Arms Group, Tobacco Group, and Activities Group). In addition, the size of most of the artifacts are over 1" with many intact metal objects (possibly farming equipment that was not collected due to size). Some other items that were identified in the field, but not collected,

Figure 12. View of brick scatter at the site.

were a shovel head, a horse shoe, an axe head, a door hinge, and a portion of a sewing machine pedal.

While logging has recently taken place, the logging does not appear to have severely damaged the site. Given the amount and size of artifacts and the good integrity, this site has the potential to address significant research questions about the lifeways of eighteenth to nineteenth century farmers. Very few significant sites have been recorded in Calhoun County and this would be a good opportunity to gather significant information about this under studied county.

This site is potentially eligible for the National Register of Historic Places for its potential to address significant research questions and its good integrity. The property should be avoided until the State Historic Preservation Office has reviewed and assessed the site.

While spanning the site (between Stations 433 and 436) is an option for site avoidance, the boundary has been determined for the western side. Relocating the transmission line at least 70 feet to the west would remove the entire site from the right-of-way.

38CL79

Site 38CL79 is a twentieth century house and sparse subsurface scatter situated on a ridge top at an elevation of about 330 feet AMSL (Figure 13). The site is in a mixed pine and hardwood forest with the structure almost completely within the 75-foot right-of-way for the transmission line.

Shovel testing was performed at 100-foot intervals along the corridor until Station 312+14 was positive. Additional testing was performed 50 feet west and east of the center of the corridor along with 50-foot intervals along the center line of the corridor. A total of eight tests were excavated with three (38%) positive (one of those tests contained only brick).

Shovel test profiles resembled the excessively drained Lakeland sands, which have an A horizon of very dark grayish brown (2.5Y3/2) sand to 0.5 foot over a yellowish brown (10YR5/4) sand to a depth of 1.8 feet.

Very few artifacts (10 total) were collected from the site. The only datable artifact was a single piece of undecorated whiteware (n=1), which has such a wide date range and is still being produced today. The clear glass (n=2) and window glass (n=5) appear to be modern. Also recovered from the site is aqua glass (n=1) and a slate fragment (n=1).

The site area along the corridor extends for about 100 feet (north-south). The corridor appears to be the western-most boundary of the site, and as with the previous site, the eastern boundary was not determined due to the distance from the project area. A central UTM coordinate

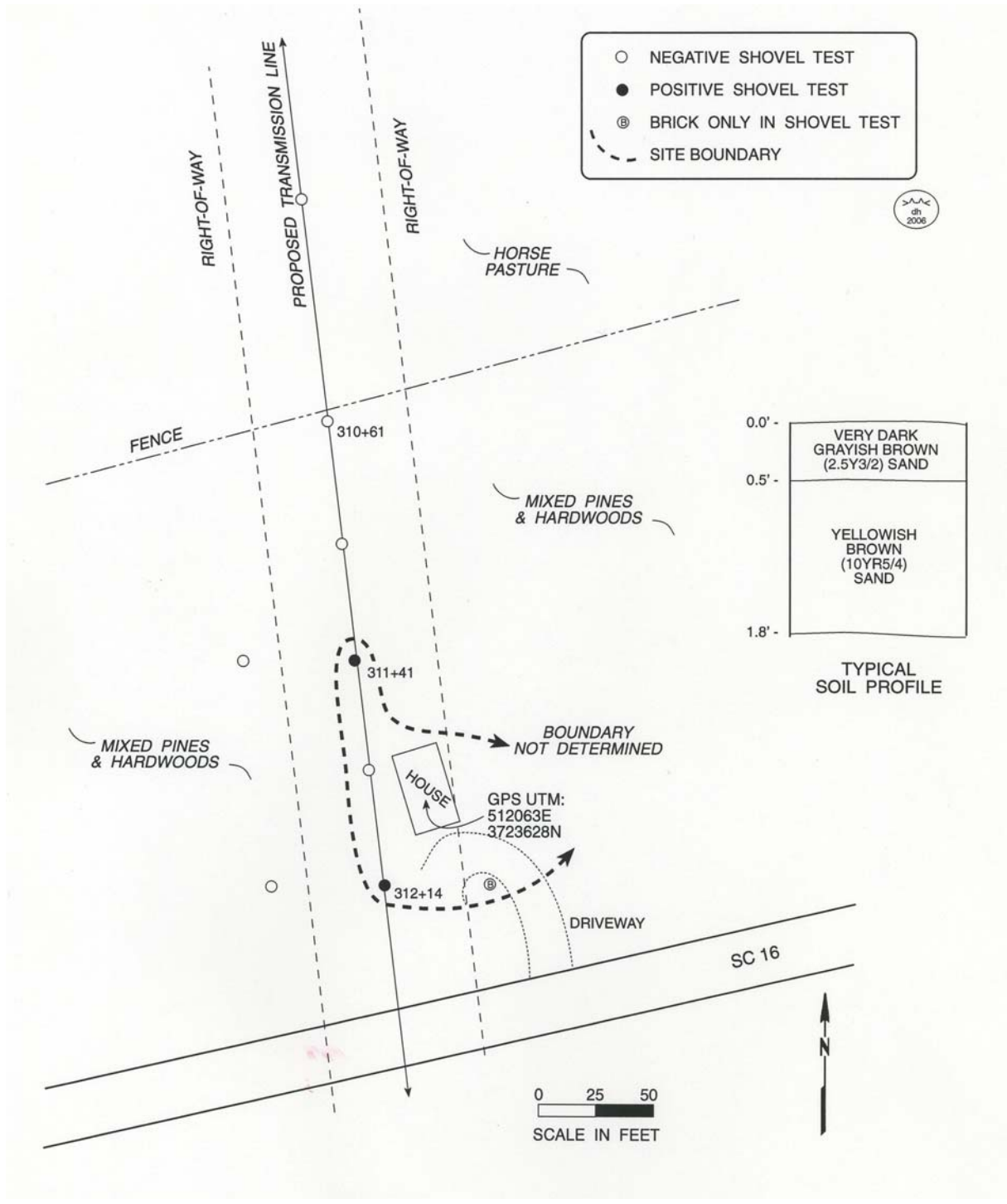

Figure 13. Sketch map and soil profile for 38CL79.

(taken at the structure) is 512063E 3723628N (NAD27 datum).

This site produced very few artifacts and those present could not be definitively dated. In addition, these artifacts are common and do not retain the ability to address significant research questions. While the structure is still standing, it is in ruinous condition, having been allowed to fall into disrepair and is being used for the storage of hay (Figure 14).

Figure 14. View of structure in ruinous condition.

Because of the low density of artifacts and the inability to date the site, this site has a very low potential to address significant research questions. It is therefore recommended not eligible for the National Register of Historic Places. No additional management activity is recommended pending the review and concurrence by the State Historic Preservation Office.

38CL80

Site 38CL80 is a twentieth century domestic structure situated on a ridge side slope at an elevation of about 315 feet AMSL (Figure 15). Mixed pines and hardwoods surround the site, which is located off Roundleaf Trail.

Shovel testing was performed at 100-foot intervals along the corridor, but none of the tests were positive. The shovel tests profile, however, resembled the excessively drained Lakeland sands, which have an A horizon of very dark grayish brown (2.5Y3/2) sand to 0.5 foot over a yellowish brown (10YR5/4) sand to a depth of 1.8 feet.

As previously mentioned, no artifacts were found in the shovel tests, however, a pile of modern trash including beer cans and clear glass jars were located in the vicinity of the structure. The structure itself, which is in ruinous condition, only extends a couple of feet into the 75-foot right-of-way for the project (Figure 16). It is possible that artifacts may be found on the other side of the structure (west of the survey area), however this is far enough from the project area that it will not impact the current undertaking.

Because of the lack of artifacts and the inability to address significant research questions, this site is recommended not eligible for the National Register. No additional management activity is recommended pending the review and concurrence with the State Historic Preservation Office.

Architectural Resources

No historic properties were recorded on the Archives and History GIS. While no comprehensive architectural survey has been performed for Calhoun County, a drive of the surrounding roads failed to identify any structures that retain enough integrity to be eligible for the National Register of Historic Places.

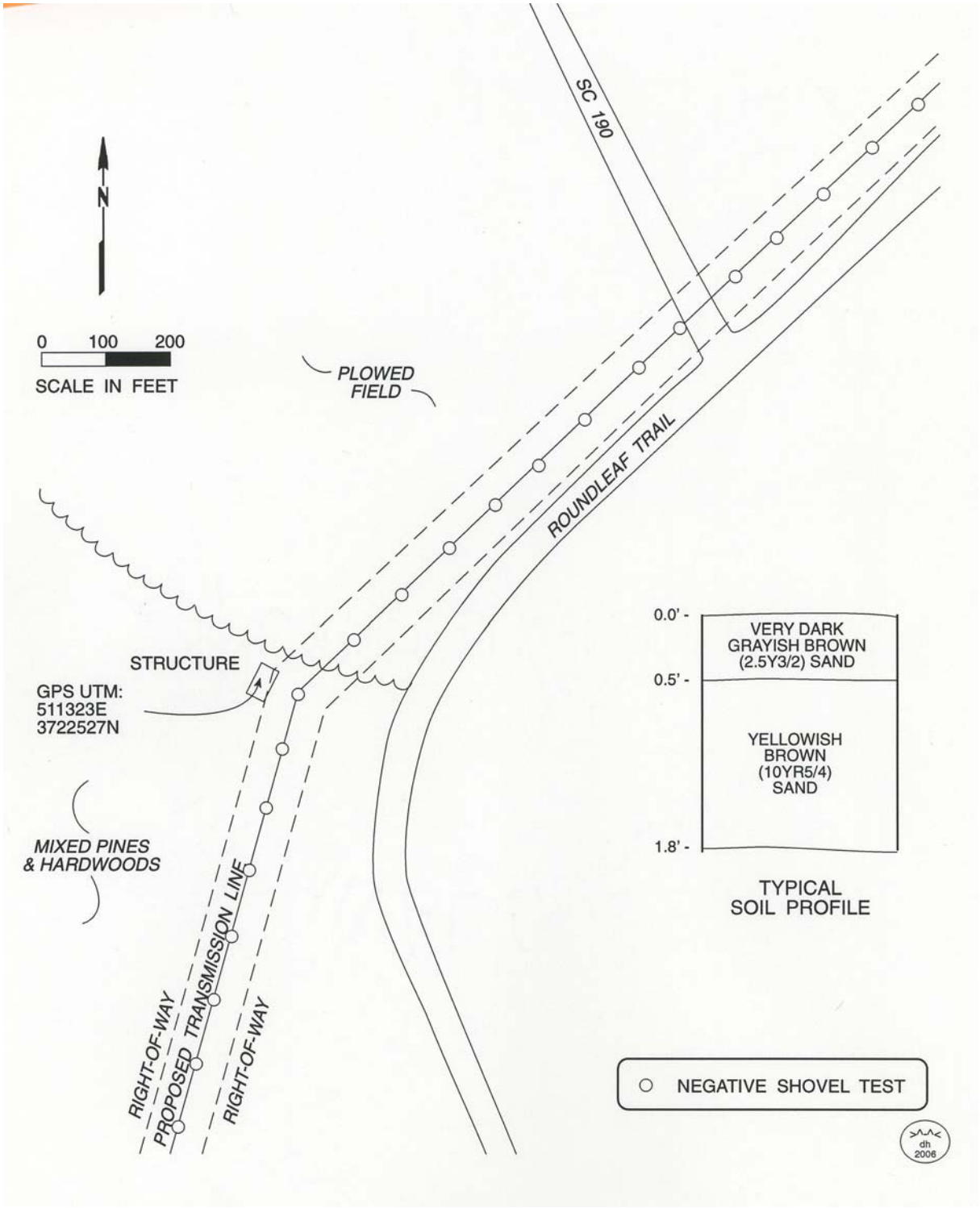

Figure 15. Sketch map and soil profile for 38CL80.

Figure 16. View of structure from the transmission corridor.

CONCLUSIONS

This study involved the examination of an approximately 8.5 mile corridor in Calhoun County be used for a transmission route. This work, conducted for Mr. Tommy Jackson of Central Electric Power Cooperative, provides the results of that investigation and is intended to assist the company comply with their historic preservation responsibilities.

As a result of this investigation, three archaeological sites (38CL78-80) were identified. Site 38CL78 is an eighteenth to nineteenth domestic site that is potentially eligible for the National Register for its ability to address significant research questions. While the final determination is made by the State Historic Preservation Office, Central Electric Power Cooperative should be prepared to either span the site (which is located between Stations 433 and 436) or move the transmission corridor at least 70 feet west in order to completely avoid the site.

The other two sites (38CL79 and 38CL80) are both twentieth century domestic sites, each with a standing structure in ruinous condition. Site 38CL79 produced very few artifacts, while 38CL80 failed to produce any subsurface artifacts. Both sites are recommended not eligible for the National Register of Historic Places for their inability to address significant research questions.

While no comprehensive architectural survey has been completed for Calhoun County, the roads within 0.5 mile of the corridor were driven in the attempt to identify any standing structures that may be eligible for the National Register. The surrounding area is still fairly rural, but no such structures were found.

It is possible that archaeological remains may be encountered during construction activities. As always, contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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